

## ABSTRACT

Where it was generally thought that the smallest breakdown products of proteins had no specific biological function on their own, it now emerges that the body may utilize the normal process of proteolytic breakdown to generate important compounds such as gene-regulatory compounds. For instance, certain short breakdown products of hCG (*i.e.*, short peptides which can easily be synthesized, if needed modified, and used as a pharmaceutical composition) exert a major regulatory activity on pro- or anti-inflammatory cytokine cascades that are governed by a family of crucial transcription factors, the NF- $\kappa$ B family, which generally regulate the expression of genes involved in the body's immune response.